LISTING OF CLAIMS

CLAIMS

1. (Currently Amended) An inlet seal assembly for sealing an injection port member in a gas chromatography instrument, comprising,

a chromatography instrument

an injection port member in the chromatography instrument having a bottom surface with a raised metal ring, or alternatively a flat or any other sealing surface,

an inlet seal member with an upper surface,

a peripheral groove formed in the upper surface of the inlet seal member,

a soft ring made of resinous plastic material positioned in the peripheral groove of the inlet seal member opposite the raised metal sealing ring of the injection port member,

a reducing nut holding the inlet seal member against the injection port member, and

thread means connecting the reducing nut to the injection port member whereby to press the soft ring of the inlet seal member against the raised metal sealing ring of the injection port member to form a seal between the sealing ring and the injection port member.

2. (Original) The inlet seal assembly of claim 1,

the injection port member being a hollow tube.

3. (Original) The inlet seal assembly of claim 1,

wherein the reducing nut forms a cup-like chamber holding the inlet seal member and has threads along the inside of the sides of the cup which mesh with threads on the outer side surface of the injection port member.

4. (Currently Amended) A method of sealing an injection port member in a gas chromatography instrument comprising,

providing a gas chromatography instrument,

providing an injection port member in the gas chromatography instrument with a resinous metal ring on its bottom surface,

providing an inlet seal member having an upper surface,

forming a peripheral groove on the upper surface of the inlet seal member,

filling the peripheral groove with a soft resinous plastic material to form a ring,

placing the inlet seal member in a reducing nut between the nut and the injection port member,

connecting the reducing nut to the injection port member by providing threads between them,

forming a seal by tightening the threads between the reducing nut and the injection port member to press the metal sealing ring onto the soft ring to form a seal between the injection port member and the inlet seal member.

5. (Currently Amended) The method of claim 4, including

~~using the injection port assembly by~~ ejecting gas or liquid from the injection port member through an opening in the inlet seal member and through an opening in the reducing nut.

6. (New) An inlet seal assembly for sealing an injection port member in a

gas chromatography instrument, comprising

an injection port member having a bottom surface with a raised metal ring, or alternatively a flat or any other sealing surface,

an inlet seal member with an upper surface,

a peripheral groove formed in the upper surface of the inlet seal member,

a soft ring made of resinous plastic material positioned in the peripheral groove of the inlet seal member opposite the raised metal sealing ring of the injection port member,

a reducing nut holding the inlet seal member against the injection port member, and

thread means connecting the reducing nut to the injection port member whereby to press the soft ring of the inlet seal member against the raised metal sealing ring of the injection port member to form a seal between the sealing ring and the injection port member.

said inlet seal member having a bottom surface,

a bottom peripheral groove formed in the bottom surface of the inlet seal member.

a bottom soft ring made of resinous plastic material positioned in the bottom groove of the inlet seal member,

said bottom ring extending downwardly out of the bottom groove so as to touch the upper surface of the reducing nut to squeeze the bottom ring and make a bottom seal between the bottom of the inlet seal member and the upper surface of the reducing nut,

thus forming a double seal of the inlet seal member comprising an upper seal and a bottom seal.